


BROADBAND EXPANSION GRANT APPLICATION

For Fiscal Year 2022

 Public Service Commission of Wisconsin
 RECEIVED: 03/17/2022 2:23:19 PM

Primary Applicant (Name and Address): Baldwin Telecom, Inc. dba Baldwin LightStream 930 Maple Street Baldwin, WI 54002	Applications MUST be UPLOADED to ERF via the Commission's website, http://psc.wi.gov/apps35/ERF_upload/content/mymenu.aspx . Refer to section 2.3 for detailed instructions. Applications are due and MUST be uploaded to ERF no later than: March 17, 2022 at 4:00pm (16:00) Central Time. Late applications will not be accepted.	
	Contact for further information: PSCStatebroadbandoffice@wisconsin.gov	
	Date: March 17, 2022	
The Public Service Commission of Wisconsin is seeking applications for Broadband Expansion Grants. The Commission may award one or more grants during Fiscal Year 2021 to public and private entities that meet the eligibility requirements set forth in Wis. Stat. § 196.504. Successful applicants will demonstrate a clear and achievable plan to improve broadband communications services in one or more underserved areas in the state.		
Applicant Certification: In signing this application, the undersigned verifies under penalty of perjury that the Applicant and its employees and agents have not, either directly or indirectly, entered into any agreement or participated in any collusion or otherwise taken any action in restraint of free competition with respect to this application; that no attempt has been made to induce any other person or firm to submit or not to submit an application; that this application has been independently arrived at without collusion with any other proposer, competitor or potential competitor; that this application has not been knowingly disclosed prior to the opening of applications to any other applicant or competitor; that all of the responses and representations of Applicant in this application are true and correct to the best of the undersigned's knowledge, information, and belief; and that Applicant agrees to, accepts, and will comply with all of the terms and conditions respecting this application and any award of a broadband expansion grant as may be established in a grant award Agreement.		
Name of Authorized Representative (Type or Print) Matt Sparks	Title General Manager	Phone (715) 684-3346
Signature of Authorized Representative 	Date March 15, 2022	

SUMMARY OF GRANT APPLICATION

Primary Applicant Name Baldwin Telecom, Inc. dba Baldwin LightStream	Amount of Broadband Grant Request (round to nearest dollar) \$295,773.00 (40%)
Federal Employer Identification No. 39-0146640	Amount of Matching Funds Pledged (round to nearest dollar) \$443,659.00 (60%)
Contact Name and Title Matt Sparks, General Manager	Total Cost of Proposed Project (round to nearest dollar) \$739,432.00
Telephone Number 715-684-3346	Project Name South Warren, St. Croix County
E-mail Address msparks@lswi.net	Type of Proposed Broadband Service (FTTH, Cable, DSL, etc.) Fiber-to-the Home (FTTH)
Grant Manager, if different than Primary Applicant	Grant Manager Federal Employer Identification No.
Grant Manager Contact Name	Grant Manager Email Address and Telephone Number
If the application proposes a public-private partnership, list the names, addresses, and FEINs of the partner companies or organizations The application does not propose a public-private partnership.	
Brief Project Description Broadband grant application will connect all eligible locations in South Warren, St. Croix County to FTTH facilities and provide high-speed broadband to small businesses, residential and agricultural residents.	
Proposed Maximum Download Transmission Speed 1 Gig and faster	Proposed Maximum Upload Transmission Speed 1 Gig and faster
Proposed Minimum Download Transmission Speed 200Mbps	Proposed Minimum Upload Transmission Speed 200Mbps
County or Counties served by this project St. Croix County	Community or Communities served by this project South Warren, St. Croix County
List of the broadband service providers, if any, currently serving the area the applicant proposes to serve There are no known 25/3 Mbps broadband service providers in the proposed eligible grant area of South Warren, St. Croix County. For the residents that are able to subscribe to incumbent provider's service, they report it being slow and unreliable.	

<p>Does proposed project serve an <u>unserved</u> area of the State, as defined in <u>Section 1.4</u> of the application instruction? (yes/no) No, not according to broadband map but residents state that they are not able to get advertised speed.</p>	<p>Is the Applicant certified as a Broadband Forward! Community or Telecommuter Forward! Community, or does the grant project propose to serve a Broadband Forward! Community or Telecommuter Forward! Community? (yes/no) Yes, Town of Kinnickinnic is certified as a Broadband Forward! Community</p>
<p>For last mile projects or component the expected number of Business Locations that will have access to the improved broadband service (i.e., total business locations passed or with new service access). 15 unserved and underserved small business/work from home locations and agricultural/farm locations will have access to high-speed broadband service</p>	<p>For last mile projects or components the expected number of Residential Locations that will have access to the improved broadband service (i.e., total residential locations passed or with new service access). 89 unserved and underserved residential locations will have access to high-speed broadband service</p>
<p>Of the improved business locations, how many locations are unserved? Unknown</p>	<p>Of the improved residential locations, how many are unserved? Unknown</p>
<p>For providers that are eligible telecommunications carriers will the proposed broadband service be available to Lifeline customers? (yes/no) Yes</p>	<p>Are there any programs available for low-income households to access low-cost service or discounts? (yes/no) Yes</p>
<p>Is the internet service provider currently participating in the Emergency Broadband Benefit Program? (yes/no) Yes, BTI was an Emergency Broadband Benefit Program and now under the Affordable Connectivity Program</p>	<p>Is the internet service provider currently participating in the Department of Public Instruction and CESA purchasing's Digital Learning Bridge? (yes/no) Yes</p>
<p>Did the internet service provider participate in the Public Service Commission's voluntary Broadband Coverage Data Collection in 2012? (yes/no) Yes</p>	

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Summary of Project Budget and Funding Statement – Cost Categories and Funding

FY22 Broadband Expansion Grant Application

Budget & Income Summary



Please complete this form using Microsoft Excel. A PDF copy must be attached to your application as page four. In addition, this form must also be uploaded to ERF in Excel format.

Grant Summary

Grant Applicant:	Project:
Baldwin Lightstream	Warren South

Budget

Line:	Description / Category:	Grant Funds:	Match:	Total:
1	Contractual, Consultant Fees	\$ 277,968.00	\$ 416,952.00	\$ 694,920.00
2	Equipment (Calix ONT's, Routers)	\$ 17,805.00	\$ 26,707.00	\$ 44,512.00
3	Supplies			\$ -
4	Labor (Salary, Fringe)			\$ -
5	Permitting, Licensing Fees			\$ -
6	Travel			\$ -
7	Other			\$ -
Total:		\$ 295,773.00	\$ 443,659.00	\$ 739,432.00
60.0% match requested				

Pledged Contributions

#:	Entity:	Entity Type:	Pledge Type:	Pledge:
1	Baldwin Lightstream	Applicant	Cash	\$ 443,659.00
Total:				\$ 443,659.00

Map of Proposed Broadband Expansion in this Application

All locations included in the proposed South Warren project, as shown in the map below, are within the eligible area for Broadband Expansion Grant Map as viewed on March 14, 2022. No ineligible locations according to this map are included in the application.



As shown on this map, Baldwin LightStream’s South Warren project area includes 104 unserved and underserved locations. There are residential, non-agricultural small business/work from home locations as well as agricultural/farm locations in the proposed project area.

CenturyLink states that their DSL service provides a 6 Mbps connection. This may be true at their cabinet, but residents of the area state that the bandwidth decreases the further away that you get from the electronics. From conversations with people living in the area it appears that there are more unserved areas than the PSC map is showing.

This application is for reliable Fiber to the Home broadband connections likely to last for 25-50 years. LTD Broadband is a wireless RDOF auction applicant in this project area. While Baldwin LightStream supports the position taken by several state broadband commissions and associations doubting that LTD has the technical, engineering, financial, operational, management, staff, and other needed resources to meet any RDOF build-out and service obligations by December 31, 2024.

Executive Summary

Baldwin Telecom, Inc. (BTI) is submitting this application for a grant in the amount of \$295,773.00. BTI board of directors approved use of funds for the buried fiber project. This grant will provide high-speed broadband to all 104 eligible locations in South Warren. This project will also provide a redundant route from BTI's ILEC serving area to BTI's CLEC serving area in Town of Hudson. The proposed project area is located adjacent to BTI's ILEC area and successful CLEC serving areas of the Village of Roberts and Town of Hudson. The project will be an extension of existing fiber optic facilities. The residents of South Warren currently do not have a broadband provider as defined by the PSCW. The proposed buried fiber project is superior to other technologies including aerial fiber optic cable.

This project will benefit all eligible locations in South Warren, St. Croix County. This area features geography designated as unserved and underserved in the PSC Broadband Map as viewed on March 8, 2022 and is therefore eligible for the Broadband Expansion Grant.

This grant application is for the installation of fiber-based broadband to 89 residential and 15 non-agricultural and agricultural small business locations in South Warren with expected growth as residents of this area are able to subscribe to their first available fiber-based broadband internet service. Traveling on I-94, South Warren is located just south of I-94 between the village of Baldwin and city of Hudson. According to the UW-Madison Applied Population Laboratory, St. Croix County is projected to gain 41% percent grown from 2010-2040, the highest percentage gain in the state. South Warren is a rural community comprised of farms and residential developments. Many young families live in the area. The proximity to I-94 allows residents to live in a quiet, picturesque rural setting and work in the metropolitan cities of St. Paul and Minneapolis. In addition to the fiber facilities, BTI will be providing the latest carrier grade next generation Wi-Fi 6.1 router when connecting South Warren customers. This state of the art router will insure that customers have the best customer experience.

Incumbent providers serving the proposed grant areas have not been responsive to the broadband needs of the area. Broadband infrastructure is costly to build in rural areas and the South Warren project has significant variations in customer density as noted on the map on page 6 of this application. Some sections of the area are more populated while others only have one or two houses per mile.

Although the COVID-19 pandemic is disrupting our lives less and less, it intensified the need for high-speed broadband in the proposed area. When Wisconsin schools closed in March, 2020, students in South Warren struggled due to the lack of high-speed broadband. During the pandemic area doctors and medical facilities expanded their use of telehealth to screen and treat patients. South Warren residents weren't able to set up video visits. A number of South Warren residents were affected when companies forced their nonessential employees to work from home. South Warren residents reported frustrations with their connection dropping while presenting on Zoom and files taking a long time to load. Although working from home was initially considered a temporary situation, it has become a permanent situation for many workers. Some employers closed their brick-and-mortar businesses. South Warren residents must continue to commute to their employment in the Twin Cities, some spending a minimum of two hours per day on the road. The lack of high-speed broadband in South Warren makes it difficult for residents to stay connected. Although no longer required to social distance, the use of Zoom meetings, video chats, online banking, and online shopping is the norm. COVID-19 forever changed the way that we live and increased the demand for high-speed broadband in the proposed project area.

Realtors say that having high-speed internet in a rural area significantly boosts the selling price of a home. This adversely affects the property owners in South Warren. Some have expressed that they are considering selling their home and moving to a location where high-speed broadband is available but they are concerned that there will not be buyers for their property. Many young adults from the area will move away to attend school and will never return to the area if high-speed broadband isn't available.

BTI has a strong history of anticipating and meeting the demands of its customers. We have been successful in expanding to provide services in neighboring communities. Studies show that in the past two years there has been significant demand for high-speed broadband as more employees are able to work for home. Consumers need faster speeds and high quality service. This is true of the residents living in the South Warren project area. BTI's proposed fiber broadband project will provide a high-speed connection that isn't available in this area today. Further, BTI will continue to invest in the latest technology to meet the demands of the future. Just as electricity transformed rural America nearly a century ago, South Warren needs high-speed broadband service today.

Mandatory Application Requirements

3.2.1 Applicant identification and contact information

The name and address of the entity applying for the grant, and the mailing address, telephone number and e-mail address of one or more contact persons representing the applicant.

Baldwin Telecom, Inc. dba Baldwin LightStream
930 Maple Street, PO Box 420, Baldwin, WI 54002
Phone 715-684-3346
Email mspark@lswi.net

Baldwin Telecom, Inc. (BTI) is an Incumbent Local Exchange Company (ILEC) and Competitive Local Exchange Company (CLEC) certified to provide telecommunications service in the State of Wisconsin. In 2015 began using DBA of Baldwin LightStream. The new name demonstrates the company's shift from landline phone service to broadband and attention to staying at the forefront of technology.

BTI provides voice, video and broadband services in the ILEC servicing area of Baldwin and Woodville in addition to the villages of Hammond, Roberts; towns of Hudson and Troy; select business locations in the cities of Hudson, River Falls and New Richmond. BTI provides video and broadband service in Knapp also.

BTI is a Wisconsin company. The Board of Directors and management team live in the community and serve on boards of community organizations.

b. If the application proposes a public-private partnership, the identity and contact information for all application partners.

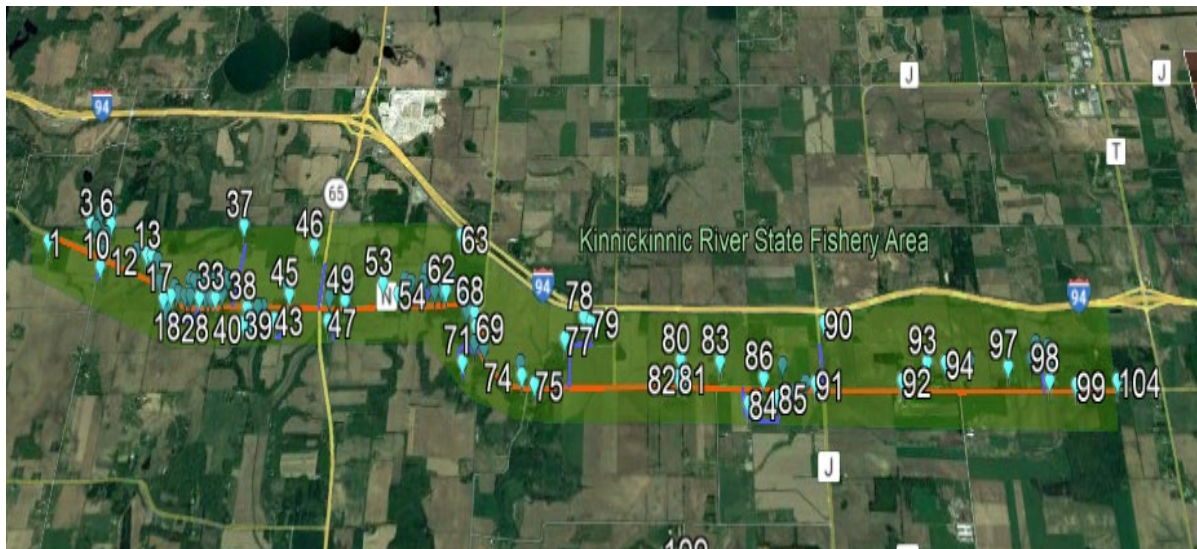
This application does not have a partnership.

c. The application must show that the applicant is an organization, a telecommunications utility, or a city, village, town, or county that has established a legal partnership or joint venture arrangement with an otherwise qualified organization or telecommunications utility, and as such meets the eligibility requirements set forth in Wis. Stat. § 196.504(1).

Baldwin Telecom dba Baldwin LightStream is certified to provide telecommunications service in the State of Wisconsin pursuant to Section 196.50(2)(b) of the Wisconsin State Statutes.

3.2.2 Description of the project

a. A static map and description of the area of the state that will be affected by the proposed project.



This application for South Warren is an extension of BTI’s existing fiber optic facilities. BTI has facilities to numerous customers along US Hwy 12 in the Village of Roberts and the Town of Hudson. South Warren is located south of the CLEC areas.

Many of South Warren’s residents are younger adults that commute to the Twin Cities for their employment but wish to raise their family in a rural community. According to the most recent United States census data, St. Croix County had a growth rate of 1.09% in the past year.

The agricultural locations in South Warren are comprised of dairy farmers and crop farmers. There are several small business owners living in the area that work from home and operate a business out of their home.

- b. If the project area lies within a census block designated as served on the PSC Broadband Map, provide additional documentation to demonstrate the actual broadband service that is available in the proposed project area.

All of the locations in the South Warren project area are unserved and underserved. The Broadband Map shows five served locations but the information is not accurate. One location has slow and unreliable DSL and the remaining four do not have any service.

- c. An explanation of how the proposed project will increase broadband access.

This proposed fiber project increases access to high-speed broadband and benefits the local community in many ways:

- Will provide the opportunity for all eligible locations to connect to a FTTH network in areas where no fiber based broadband is available or proposed. FTTH connections provide the fastest and most reliable access to high-speed broadband.**
- Will provide the opportunity for residential and small business owners to subscribe to service at and above Wisconsin’s 25/3 Mbps minimum. Larger business customers will have scalable options starting at 200 Mbps. The fiber based service can be scaled to meet customer needs.**
- Will provide for the construction to be completed quickly.**
- Will provide an opportunity for residents to work from home rather than commuting to their job.**
- Will provide more opportunities for residents to access online healthcare.**
- Will provide increased educational opportunities for families including the ability to complete homework “at home” and enroll in online classes.**

- d. A statement whether the proposed project is targeting the “last mile,” “middle mile,” or backbone portion of the broadband infrastructure.

BTI will be responsible for the installation of last mile fiber based broadband backbone facilities in the public right-of-way in the proposed areas. The installation of nine miles of mainline fiber will provide all eligible locations the opportunity to connect high-speed broadband services derived from fiber local loop connections.

No middle mile infrastructure, or costs, are included in this grant application.

BTI maintains sufficient middle mile and backhaul facilities and capacity on its existing backbone ring network to deliver high-speed broadband services to all proposed and future last mile subscribers in the area.

- e. A description of the broadband service to be provided, including estimated download and upload speeds, whether the speed is based on dedicated or shared bandwidth, and the technology that will be used. This description may be illustrated by a map or schematic diagram, as appropriate.

All eligible locations will have the opportunity to connect to FTTH services, with speeds based on dedicated facilities and bandwidth.

The initial service options available to residential customers will be expanded over time to meet demand and market pricing, with fiber-based capability to provide symmetric 1Gbps internet services. BTI consistently monitors usage and has been increasing bandwidth in service offerings with no increase in rates. Earlier this year BTI doubled the speed in its residential and business offerings.

Current popular residential offering in existing ILEC and CLEC areas:

NetStream	200Mb download/75 upload Internet plus Wisconsin and Minnesota broadcast channels	\$ 94.95
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Higher speeds are available on an individual case basis and can be bundled with voice and Cable TV services.

Business Class Symmetric Internet Offerings

200Mb	price varies depending on term
300Mb	price varies depending on term
500Mb	price varies depending on term
750Mb	price varies depending on term
Full Gig	price varies depending on term

- f. For middle mile projects:
This is not a middle mile project.
- g. A schedule by which the applicant intends to complete the components of the proposed project.

As this application is for last mile mainline, BTI will obtain required permits and finalize agreement with contractor as soon as we receive notification that grant has been awarded.

Installation of fiber facilities will be completed during the 2022 construction season, weather permitting.

All connections will be completed in 2023, well in advance of the Performance Period.

3.2.3 Itemized Budget

- a. In addition to the Summary of Project Budget that is included as page 3, applicants should include a price list or quote for any equipment the applicant intends to purchase, including capital expenditures. The application should also indicate whether any facilities involved would be owned, rented, or leased.

Project costs are shown in Exhibit **B** of this application.

The South Warren project will be turn-key project. The hired contractor will be responsible for plowing mainline, drops and completing the splicing and testing to all eligible locations for the cost of the project. Baldwin Telecom, Inc. personnel will install all electronics and turn up services.

The total equipment cost of \$44,512 is comprised of \$30,992 for ONT's and \$13,520 for routers.

BTI will be providing the latest carrier grade next generation Wi-Fi 6.1 router when connecting South Warren customers. A fiber connection to the home and this state of the art router will provide a great customer experience.

The Baldwin Telecom, Inc. Board of Directors authorized manager Matt Sparks to work with South Warren on applying for this Broadband Expansion Grant. They further approved the use of company resources and funds for the proposed project.

All parties are committed to the proposed project and know how important it is for the continued success of the residents in South Warren.

- b. The application must show that the grant, if awarded, will not subsidize the expenses of a telecommunications provider or the monthly bills of telecommunications customers. For purposes of this grant program, subsidy means a contribution to the operating costs, including profit, of the telecommunications provider.

Baldwin Telecom will not use any of the proceeds of a grant award to subsidize non-construction expenses, or to subsidize billings to its telecommunications subscribers.

If BTI is awarded this broadband grant, all of the funds will be used for fiber facilities to provide services to the 104 eligible locations in this application.

- c. The application must show that the grant funds requested will be used for the sole purpose of constructing broadband infrastructure in the underserved areas covered by the application. Construction of broadband infrastructure may include any of the following:

BTI will use all grant funds requested for the sole purpose of constructing broadband infrastructure in the underserved area covered by our application. Construction of broadband infrastructure affirmatively will be limited to the following:

- **Project planning that takes place during the performance period.**
- **Obtaining construction permits and Rights of Way.**
- **Construction of facilities, including construction of last mile infrastructure.**
- **Installation and testing of the broadband service.**

3.2.4 Priority factors supporting the application

- a. Matching funds.** A description of the matching funds the applicant will invest in the proposed project, if any. For each element, indicate the type of match (cash, salary expense, or in-kind contribution). If the application is submitted by a partnership, identify the partner responsible for providing each element of the proposed matching funds.

- If available, provide documentation to support an offer of matching funds (minutes of a town board meeting, a letter from a prospective customer or local government official, etc.).
- Matching funds contributions must be a firm commitment of funding to the project. Contributions that vary based on the amount of actual sales, customer contributions, or other criteria will not be given weight.

BTI is providing \$443,656 in matching funds toward this project's costs. This is a 60% match.

- b. Public-private partnerships.** If the public-private partnership is memorialized in a joint venture agreement or other writing, provide a copy of that agreement.

- If the partnership has not been reduced to a written agreement, provide a short description of the management role, financial commitment, or other contribution to the project for each participating partner.

This application does not include public-private partnerships.

- In scoring this element, information regarding active engagement of diverse communities in the planning, permitting, or marketing of the project will be given weight as well.

The Broadband Forward! Ordinance insures that permitting will be expedited at a reasonable cost insuring that the project will be completed quickly.

- c. Existing broadband service.** A list of the broadband service providers, if any, currently serving the area the applicant proposes to serve. In scoring this element, the following factors will be taken into account:

The project area in this grant application is eligible according to the Wisconsin Broadband Map viewed on March 8, 2022. Using this map, no subscribers in the proposed project are receiving a 25/3 broadband service from a current incumbent provider. Customers of the incumbent provider state that the service is slow and consistently drops making it difficult for them to use the service. Most residents state that they are using a satellite service and/or hotspot. Further, there is no indication that incumbent wireline providers will be upgrading facilities.

South Warren is in RDOF auction area and LTD Broadband was the winner of the area. BTI supports the position that several state broadband associations have taken in doubting that LTD has the technical, engineering, financial, operational, management, staff, and other needed resources to meet RDOF build-out and service obligations by December 31, 2024. BTI's proposed fiber project will meet the immediate needs of the Town of Warren as well as all future needs with a very reliable network.

- The degree to which the proposed project avoids duplicating existing broadband infrastructure.

This application does not duplicate existing broadband infrastructure based on the PSCW and FCC guidance defining broadband as landline 25/3 Mbps services. In addition, it does not at any point appear to duplicate another incumbent provider's known plans to deploy 25/3 Mbps broadband services by the time this application proposes to sign-up new broadband internet services.

- The application of a wireless broadband service provider proposing significant overlap with existing broadband service in addition to service to an unserved area will not be given priority consideration.
- Provide a list of all landline broadband service providers (DSL, cable or fiber to the home) and fixed wireless broadband service providers that overlap the footprint of the proposed broadband project.

Incumbent providers South Warren

- CenturyLink advertises 6 mbps

- If known, provide an estimate of the customers within the proposed footprint that are served by competing landline and fixed wireless broadband service providers, and the download/upload speeds offered by those competing service providers.

It is unknown how many customers in the South Warren are served by competing landline and fixed wireless broadband service providers. Most locations in the area subscribed to voice services from their incumbent provider at some point in the past and may have also been connected to DSL service. Due to the slowness and unreliability of the service, many customers have disconnected the service. From the letters of support it is known that many are either using a Satellite service or a hotspot.

- Provide a list of mobile wireless broadband service providers that overlap the footprint of the proposed project.

Four CMRS cellular carriers advertise coverage of portions of the application area, AT&T, Sprint, T-Mobile, and Verizon Wireless. We have evidence that Verizon offers a wireless data service of 3/3 Mbps in the area, and presume adequate 4G and eventually 4GLTE access will expand north and south of Interstate 94.

- If known, provide an estimate of the customers within the proposed footprint that are served by competing mobile wireless broadband service providers, and the download/upload speeds offered by those competing service providers. (The presence of existing mobile wireless providers does not contribute to or affect the evaluation of existing broadband service in the project area for purposes of priority consideration, but provides a more complete picture of the broadband options available to residents.)

It is unknown how many customers in the South Warren are served by mobile wireless broadband service providers.

- For middle mile projects, describe the unserved and underserved areas that the middle mile route will transit. In scoring this element, the following factors will be taken into account:
 - The number of unserved and underserved service locations that could potentially connect through the proposed middle mile route.
 - The degree to which the middle mile route will reduce the cost of extending fiber to the premises broadband service to business and residential service locations in an unserved or underserved area.
 - The degree to which the proposed middle mile route avoids duplicating existing and planned fiber to the premises broadband infrastructure.

This is not a middle mile project.

- d. Project impact.** A description of the geographic area and the population, both in terms of absolute numbers and likely users, which will be served by the proposed project. Indicate the number of anticipated residential and business customers in the project area, if known. Explain the speed and quality of internet service that will be available. Include information about the range of packages available for purchase. Provide details on any low-income access programs and steps the project will take to support adoption

The proposed project will provide high-speed broadband to 104 residential, non-agricultural small business/work from home and agricultural/farm locations. South Warren has many young families living in it. These residents have greater demands for the latest technology. They are increasing growing more frustrated that the incumbent providers have not been responsive to their requests for high-speed broadband.

As mentioned throughout this application, we know that a high-speed broadband connection will make a huge difference in the lives of the people of South Warren. Many of the school age children attend St. Croix Central Schools. Tim Widiker, Superintendent of St. Croix Central School District, stated that there are approximately 200 households in the district that would benefit from a broadband connection. The school issues Chromebooks to every student in grades 3-12, but many are not able to use their Chromebooks at home. They must either complete the work at school or go to a location that provides Wi-Fi. Some students in the South Warren attend Hudson Schools. Nick Ouettette, Superintendent of Hudson School District, states that the district uses broadband services to provide virtual instruction; access to student grades, assignments, attendance; on-line classroom textbooks; on-line homework; communication to connect families with school news; and emergency alerts. Not having a high-speed broadband connection makes it very difficult for parents and students to use the services that the district provides. In addition, high-speed broadband would provide more opportunities for students to enroll in online classes offered by Northwood Tech (formerly WITC), CVTC and the nearby Wisconsin Universities of River Falls and Stout, and numerous universities in St. Paul and Minneapolis.

Although Telehealth services are offered by Hudson Hospital & Clinic located in Hudson, Westfields Hospital & Clinic, located in New Richmond, River Falls Area Hospital, located in River Falls and Western Wisconsin Health, located in Baldwin, the lack of high-speed internet makes it difficult for the residents of South Warren to take advantage of the offerings. A high-speed broadband connection would allow greater use of telehealth services.

The pandemic isn't disrupting lives as much as in the past two years, but the residents of South Warren are frustrated that without a high-speed broadband connection they are not able to access online church services, meetings and family gatherings that have become the norm.

Although there have been several federal programs that have expanded high-speed broadband infrastructure in unserved rural areas, the incumbent provider has not applied for funding to provide

broadband services in South Warren. Since there is continued growth in St. Croix County, one might wonder why the incumbent provider has not made upgrades to their facilities. As shown in the Summary of Project Budget and Funding Statement on Page 5, it is expensive to install fiber due to the density of the project area.

Survey research was one tool used to document opportunities to gain economic impact for this application.

In the survey we asked residents how likely they would subscribe to Baldwin Lightstream broadband if it were available in their area. The responses were very favorable, and within tolerance to recommend proceeding with an application:

- 92% Definitely or probably would subscribe
- 8% Might/Might Not/Definitely will not subscribe

From the 98 survey returned surveys we learned each demographic has its needs for high-speed broadband:

- 44% of the households reported having school age children that need broadband to use Chromebooks
- 75% of the households reported having an opportunity to work from home; many do not or cannot
- 10% of the households reported having medical conditions that could be monitored from home with telehealth
- 67% of the respondents use a hotspot or satellite internet which are costly and unreliable
- 18% of the respondents reporting using a DSL or fixed wireless service
- Respondents reported spending between \$100.00 and \$600.00 per month for voice, data and video services with the average cost being \$281.00 per month

Since BTI is a participant in the Affordable Connectivity Program, eligible consumers living in South Warren would receive a monthly discount of up to \$30 towards broadband internet service. In addition, eligible consumers would receive a one-time internet connection device reimbursement of up to \$100 for a laptop, desktop or tablet. BTI will consider applying for ETC status in the grant area based on demands for voice service same as RDOF areas. BTI participates in the Department of Public Instruction and CESA's purchasing Digital Learning Bridge.

South Warren is a beautiful rural area in a fast growing county. How will they be able to attract buyers to the area if high-speed broadband is not available? Who will fill the job openings in the county? BTI strongly believes the South Warren project will have a clear and continuing impact on the area and lead to population growth and an increase in employment opportunities.

If awarded the grant, BTI will use its Facebook page and other social media platforms to keep residents informed of the progress.

From surveys we learned the following:

- Many students in the South Warren attend St. Croix Central Schools in Hammond, WI. The district implemented the use of Chromebooks during the 2015-2016 school year. Respondents stated that the lack of a high-speed internet connection at their residence meant that their school age children had to complete their "homework" during school hours, find another location to complete their schoolwork and/or use a cellphone. Some respondents stated that they went to the nearby McDonald's to use their Wi-Fi. There is growing concern that students without broadband connection may fall behind. In addition, parents expressed difficulty in accessing grades and other notifications that the school district provides
- Although many of the survey respondents stated that their employer offered a work from home option, most were not able to take advantage of this opportunity due to poor internet connectivity. Studies have shown that the ability to work from home provides the flexibility and balance that workers are seeking. In addition, more employers are offering work-from-home options as a way to attract employees in a tight labor market. During the COVID-19 pandemic, when Wisconsin adopted "social distancing" measures, businesses closed and enacted stay-at-home orders, South Warren residents stated that their lack of broadband service made it difficult or impossible to work from home and use video conferencing.

- From the most recent survey, 10% of the respondents reported having medical conditions that could be monitored from home if they had a reliable broadband connection. Statics show that use of wearable technology has more than tripled in the last four years. During the COVID-19 pandemic, telehealth increased access to care as a way to reduce exposure to disease, reduce use of personal protective equipment and reduce demand on facilities.
- All of the letters of support from South Warren residents state their frustrations with their current situation. They are not able to use smart home devices including security systems. They are not able to start up home based businesses. Some are concerned about the ability to sell or transfer their property. Others are considering moving to a location where high-speed internet is available even though their rural setting is where they want to be.
- BTI believes that the proposed project will provide more options and possibly save money for the South Warren residents. Although using a hotspot works for some, there are disadvantages including speed, battery usage, potential for a cap on data usage, and security risks. For those residents using a satellite connection, they experience poor latency, signal issues, poor quality, high costs and most importantly the ability to use a VPN.

In addition to the survey responses from residents, prospective subscribers, professionals and elected representatives spoke to BTI's manager and staff regarding the need for fiber-based internet services in South Warren.

Letters from South Warren residents state the following concerns with their current internet provider and how the pandemic has increased the need for broadband:

- Slow internet speeds and unreliable connection.
- Satellite internet service goes out when it storms.
- Satellite internet is costly, approximately \$180/mo. for data and download speeds required for working from home.
- Ability to sell their home and the resale value of their home without a broadband connection.
- Inability to make technological improvements that require Wi-Fi.
- Inability to connect with family and friends using Skype or Zoom caused feeling of isolation for some during the COVID-19 pandemic.
- Difficulty launching new home based businesses.
- Having to invest \$1,500 in cell phone booster and use hotspot.
- Having to rent an office in town to conduct business.

No residents have a 25/3 broadband connection from their current incumbent providers in the eligible grant area. The cell towers are primarily located along the I-94 corridor and those living any distance from the towers experience reduced signal strength.

BTI's high-speed broadband service would make it possible for all eligible locations in South Warren to subscribe to a reliable high-speed broadband connection.

In addition to the survey responses from residents, prospective subscribers, professionals and elected representatives spoke to Baldwin LightStream regarding the need for fiber-based internet services in the South Warren application area.

Here's what they told us in summaries of support letters to us. Full copies of these letters are included in this application:

State Representative Shannon Zimmerman

- St. Croix County is projected to gain an astounding 41% population growth from 2010-2040.
- Broadband access is needed for economic growth.
- Having access to broadband is a make or break decision for people moving to the area.

State Senator Rob Stafsholt

- Internet access will boost local economic development

- Internet access will allow students and families to study and work from home
- Faster more dependable internet will allow residents to use telemedicine and other technologies.
- Baldwin LightStream has an excellent reputation in community.

Tim Widiker, Superintendent St. Croix Central School District

- The School District uses Chromebooks in grades 3-12 and students in grades 6-12 can take Chromebooks home to do their “homework”.
- Students aren’t able to use the Chromebooks as intended.
- When school closed in spring 2020 due to COVID-19, students faced many challenges

e. Scalability. A description of how the proposed project could expand or improve the broadband service it delivers, while maintaining the quality of its broadband service. This description should include specific projected increases in the following parameters that are known at the time of the application:

- The number of users.

BTI estimates an 85% to 90% take rate based on its successful execution in adjacent CLEC service areas of the Town of Troy and Town of Hudson and need for high-speed broadband service in this area. The proposed project is an expansion of existing FTTH facilities using core equipment.

- The number of network nodes.

The design of project is a central single node home run fiber.

- The number of services provided.

The proposed project will provide high-speed broadband, voice and video services.

- The geographic area served by the project.

The proposed project includes all eligible locations in South Warren, St. Croix County.

- This description may also include a discussion of possible growth potential that is outside the commitment the applicant is making as part of its application.

This project is intended to accommodate the growth in areas that are outside and contiguous to the FTTH grant areas. There is sufficient capacity in the proposed mainline fiber routes to accommodate growth. BTI will continue to use an active optical network instead of a passive optical network in these growth areas without the need for shared bandwidth.

This project initially deploys ultrafast broadband services over fiber facilities suitable for broadband at practically unlimited speeds, well in excess of the state’s and the FCC’s forward-looking, but only current, definition of broadband services as 25/3 Mbps. Any expansion areas outside the grant areas will be able to connect high-speed broadband, television, and all voice service features currently available to BTI’s existing subscribers.

f. Economic Development. A description of how the proposed project will promote job growth or retention, expand the property tax base or improve the overall economic vitality of the municipality or region. This description may be supplemented with a letter from one or more persons discussing the potential economic impact the project could have for that individual or business. In scoring this element, the following factors will be taken into account:

- A discussion of potential economic impact the project could have for an individual business located in the project area.
- An explanation of how an improved download and upload transmission speed could better support a specific business in the project area.
- An explanation of the likely impact improved broadband service could have on residential property values, supported by local sales data if available.

According to the ROCKET Homes website, St. Croix County is currently a Sellers Housing Market. The median sold price for homes shows an increase of 12.9% from just one year ago. In addition the number of homes for sale in St. Croix County is 2.5% less than one year ago. The 2015 study conducted by researchers at the University of Colorado at Boulder and Carnegie Mellon University show that a fiber connection increases home value by more than 3%. Increased home value means more revenue for local government and schools. Residents of South Warren are concerned that they will have difficulty selling their homes if high-speed broadband is not available.

- A demonstration of how improved broadband service to a residential portion of the project could benefit a telecommuting population.

According to data provided by the Census Bureau, St. Croix County workers commute an average of 26.2 minutes. Many workers have the opportunity to work from home but without a high-speed connection, they must travel to their place of employment.

- A demonstration of how the speeds and service being offered by the project fits with current and future economic needs of the community and local businesses.

The proposed project would provide opportunity for residents of South Warren to choose from numerous residential and business offerings starting with a 200 Mbps service. The speeds would make it possible to residents to have a house full of “connected” devices and operate a business.

- g. Effect upon broadband service to adjacent areas.** A description of whether the proposed project will or will not impair the ability of a broadband service provider or competing broadband service provider to extend broadband service to areas adjacent to the proposed project area.

This application is not likely to negatively impact broadband services availability from adjacent area providers. Quite to the contrary, the availability of FTTH broadband access in the proposed project area will served as a catalyst for demand in other rural portions of St. Croix County.

3.2.5 Other information supporting the application

- a. A description of applicant’s history or experience constructing broadband communications facilities in the state and elsewhere.
- If applicable, an applicant must comment upon the status of all prior broadband expansion grant projects that have been completed, including the type of broadband technology used, the facility route actually built or installed, the number of residential and business customers actually connected, and other relevant details of the prior project(s).
 - An applicant must also comment on broadband construction projects undertaken in prior years that were not funded in part by the Broadband Expansion Grant program.

Baldwin Telecom, Inc. (BTI) has been providing telecommunication services for 122 years. Baldwin Telephone Exchange was formed in 1900 to provide telephone service in the Baldwin-Woodville area. Throughout the years the company has always been an early adopter of new technology improving the quality of life for residents living in the communities that it serves.

In 2001 BTI began installing FTTH facilities in new housing developments. In 2002 the US Department of Agriculture recognized Baldwin Telecom, Inc. as the first independent telephone company in Wisconsin deploying FTTH in green field developments in the villages of Baldwin and Woodville. In 2006 Baldwin Telecom, Inc. received the first broadband loan awarded in state of Wisconsin by RUS to build out new developments in Town of Hudson using fiber. From 2008 to 2017 Baldwin Telecom, Inc. upgraded all of its customers in the rural ILEC service area of Baldwin and Woodville to FTTH. The fiber facilities allowed voice customers the option of subscribing to Cable TV and upgraded their DSL connection. In 2020 BTI upgraded the ILEC Villages of Baldwin and Woodville to fiber using an \$8 million RUS loan to complete the project. Initially fiber customers were able to subscribe to a 10Mbps connection. Today they are able to subscribe to a GIG/multi GIG connection.

In 2010 BTI was awarded a \$9 million federal grant/loan to install fiber optic cable in Town of Troy under the American Recovery and Reinvestment Act of 2009. The project was completed in 2011. Currently BTI has more than 1,500 customers in the Town of Troy.

In 2014 BTI extended its fiber network to the City of New Richmond and provides service to the St. Croix Health and Human Services, New Richmond School District, City of New Richmond, Westfields Hospital and many other key businesses. BTI continued the fiber network to the St. Croix Crossing, the bridge spanning the St. Croix River between Oak Park Heights, MN and Town of St. Joseph, Wisconsin. The bridge opened on August 2, 2017 and BTI is ready for the growth that is expected in this area.

When the FCC announced the opportunity for operators to bid on Rural Digital Opportunity Fund (RDOF) auction in 2020, BTI bid on several census blocks in St. Croix and Pierce County. BTI was successful in getting fifteen locations in two census blocks.

Throughout the years BTI has made a large investment in deploying and upgrading broadband service to the following areas:

<u>Construction Period</u>	<u>Area Served</u>	<u>Investment</u>
2006-2007	Town of Hudson – phase 1 upgrade portion of area to fiber	\$4,733,000
2011-2012	Town of Troy – complete new build	\$9,067,898
2015-2016	Businesses in City of New Richmond to St. Croix Crossing	\$2,000,000
2018-2020	Town of Hudson – phase 2 convert remaining areas to fiber	\$6,000,000
2020-2021	RUS loan to upgrade villages of Baldwin and Woodville	\$7,003,415
2021-2021	RDOF broadband – Coulee Road and Baer Drive	\$ 149,306*

*The investment for construction in RDOF broadband is only an estimate as the work has not been completed. BTI will receive \$11,370 of support over the next 10 years for this construction.

BTI currently provides broadband service to more than 9,000 residential and business customers in our ILEC and CLEC areas. BTI provides a GIG/Multi GIG connection to the schools of Baldwin-Woodville, St. Croix Central, Hudson, River Falls and New Richmond and several businesses.

South Warren is located just west of our ILEC area and south of our existing CLEC service areas in Village of Roberts and Town of Hudson. In conversations with residents of South Warren, we anticipate that most of the residents will subscribe to broadband service as soon as the project is completed. All parties are confident that BTI can manage the project; will be successful in completing the project on time; has the funding to undertake the project; and will provide the quality of service that they need and expect.

In summary, BTI has been a key partner in many area communities for more than 100 years. We provide broadband service in the ILEC areas of Baldwin and Woodville and CLEC areas including the villages of Hammond, Knapp, and Roberts, Town of Hudson, Town of Troy, business parks in cities of River Falls, Hudson, and New Richmond. BTI is committed to strengthening the communities that it serves by contributing to the many academic and athletic organizations in each of the schools, belonging to the area chambers and supporting other civic organizations in the communities. BTI works with their business customers to meet their ever-changing broadband needs.

BTI's board of directors and management team live in the Baldwin-Woodville community. Many of the directors are or have been business owners. Managers of BTI are active members of the Wisconsin State Telecommunications Association (WSTA). BTI's staff belong to the St. Croix Economic Development (SCEDC), village board, local fire department, chamber, Lions Club and other community organizations. Due to the community engagement of the directors and staff, BTI has a history of successfully meeting the needs of its business and residential customers. Locally owned and managed, BTI's directors continually look for opportunities to expand broadband facilities to areas that are in need of broadband service.

- b. A description of how the proposed project will or will not duplicate existing broadband infrastructure.

This application does not duplicate existing broadband infrastructure based on the PSCW and FCC guidance defining broadband as landline 25/3 Mbps services. In addition, it does not at any point appear to duplicate another incumbent provider's known plans to deploy 25/3 Mbps broadband services by the time this application proposes to sign-up new broadband internet services.

- c. A description of an applicant's financial ability to undertake the proposed broadband construction project. This may include information such as the number of years the company has been in operation, documentation of successful completion of similar infrastructure projects, evidence that sufficient funds are available to cover project expenditure and match, customer turn-over rates, and credit rating.

Baldwin Telecom, Inc. has been providing telecommunication services since 1900.

In 2001 BTI began installing FTTH facilities in new developments. In 2002 the company was recognized by United States Department of Agriculture as the first independent telephone company in Wisconsin deploying FTTH in green field developments in the villages of Baldwin and Woodville.

In 2006 Baldwin Telecom, Inc. received the first broadband loan awarded in state of Wisconsin by RUS to build out new housing developments in Town of Hudson using fiber. From 2008 to 2017 Baldwin Telecom, Inc. upgraded all of its customers in the rural ILEC service area of Baldwin and Woodville to FTTH. During 2020-2021 the ILEC Villages of Baldwin and Woodville were upgraded to fiber. BTI received an \$8 million loan from RUS to complete this project.

In 2010 Baldwin Telecom was awarded a \$9 million federal grant/loan to install fiber optic cable in Town of Troy under the American Recovery and Reinvestment Act of 2009. The project was completed in one year.

In 2014 BTI extended its fiber network to the City of New Richmond and provides service to the several key businesses. BTI continued the fiber network to the St. Croix Crossing, the bridge spanning the St. Croix River between Oak Park Heights, MN and Town of St. Joseph, Wisconsin. BTI has facilities in place to provide service when development starts in this area.

Recently BTI upgraded all coax facilities in the Town of Hudson to fiber. BTI obtained a loan from Bremer Banks to complete the upgrade and in 2021 paid off the loan.

As shown in section 3.2.5 a, in the last sixteen years BTI has invested nearly \$29 million in upgrading existing areas and building out new fiber areas.

The company has maintained its strong financial condition since inception in 1900.

Baldwin LightStream Board of Directors authorized internal funds necessary to complete both the initial last mile mainline fiber build, and for activation of new subscribers at their March 2022 board meeting.

Baldwin Telecom, Inc.'s PSC Annual Questionnaires outlining the company's financial condition are on file.

- For middle mile projects, state the terms under which the applicant will make its middle mile fiber resource available to last mile providers. Without disclosing project-specific or customer-specific negotiated rates for service or access, state whether access to the middle mile fiber resource will be offered to last mile providers at a rate that is reasonable and common to the industry. Describe any restrictions or limits that may limit the availability or interconnection with the middle mile route.

This is not a middle mile project.

- For middle mile routes, state the amount of fiber capacity, by number of fiber strands in a cable, that the applicant has been reserved for public use. Describe any commitment or tentative discussion indicating the local government or State agency that might use those fiber strands, and for what purpose. Describe any restrictions or limits that may limit the public use (e.g. a possible use conflicts with an existing program covering the same subject matter).

This is not a middle mile project.

- A description of how the proposed project will affect the ability of individuals to access health care service from home, including any impact upon the costs of those services.
 - Specific information from a hospital or clinic in the project area that currently uses or intends to use home-based

Residents South Warren are very fortunate to have access to many medical care facilities in St. Croix County. Nearly all of the facilities offer telemedicine so that patients can connect with their doctor online. Hudson Hospital & Clinic and Westfields Hospital & Clinic belong to HealthPartners network of care providers. HealthPartners offers Virtuwel, their 24/7 online clinic, that provides treatment for over 60 conditions. River Falls Area Hospital is part of the AllinaHealth system and offers TeleHealth appointments.

Having a reliable high-speed broadband connection would allow more residents to use this service.

- A description of how the proposed project will affect the ability of students to access educational opportunities from home.
 - Specific information on the likely number of students that will benefit from improved access to educational opportunities from home would be useful.

Many of the students living in South Warren attend St. Croix Central School District. Every St. Croix Central student in grades 3-12 are issued Chromebooks, which are used as learning tools in their

education. According to letter from Superintendent Tim Widiker, there are approximately 200 households in the district, including those in South Warren, which would benefit from a high-speed broadband connection.

Northwood Tech (formerly WITC) has a location in New Richmond, WI, a city located 10-15 miles from South Warren residents. Many classes are offered online and virtually.

- Specific information regarding educational programs that are currently available for students in the project area would be useful.

Students in the South Warren are able to enroll in virtual education programs offered by two districts in the proposed project area.

Saint Croix Academy of Virtual Education is part of the St. Croix Central School District. It serves 78 students in grades Prekindergarten through grade 12. The student population has grown by 150% over five school years.

The Hudson Virtual Academy is open to all Wisconsin students in grades 9 to 12 whether you are a resident or non-resident of the Hudson School District.

- A description of actions taken by a city, village, town, or county in support of the grant application that have not been discussed in the context of a public-private partnership above, including but not limited to:
 - The contribution of funds, easements or permissions to use publicly owned real estate, construction materials, or other items of value to the grant project.
 - The contribution of other items of benefit to the grant project, such as public outreach and education, vehicles, water etc.
 -
 - Certification as a Broadband Forward! Community or Telecommuter Forward! Community

The Town of Kinnickinnic has enacted a Broadband Forward! Network Project Ordinance.

- Letters and messages in support of the application submitted by prospective customers, local government officials, and other interested persons.

A sampling of received Letters of Support is presented in Exhibit D of this application.

- Any other equitable factor that the applicant desires to discuss, including one or more of the factors in Wis. Stat. § 196.03(6) that the applicant believes its project would advance. In discussing this element, the following information may be useful:
 - Technical support and training materials that the applicant intends to provide.

BTI will add a section to the baldwinlightstream.com website that will provide important information for residents of the proposed project area. They will be able to attend the classes that BTI offers to anyone needing assistance accessing and using internet features. BTI's IT staff of highly trained workers are available during normal office hours. BTI's HELP DESK is available 24/7/365.

- Information that the applicant intends to use to promote better broadband adoption and use.

BTI staff are experienced at rolling out services in new areas. They will use this experience in the proposed project area. Staff will hold informational meetings for residents to learn about the construction project and service offerings. BTI will mail promotional materials to all the residents and add a section to the baldwinlightstream.com website for South Warren. BTI will use Facebook to announce availability, special offers and meeting dates.

- A description of a program or outreach to provide assistance to individuals of low income. Any other equitable factor that the applicant desires to include

BTI will include the Affordable Connectivity Program eligibility information in all materials that will be mailed or made available to South Warren residents.

Exhibits

Exhibit A – Construction Costs

Exhibit B – History of Baldwin Telecom, Inc.

Exhibit A – Construction Costs**FY22 Broadband Expansion Grant Application****Budget & Income Summary**

Please complete this form using Microsoft Excel. A PDF copy must be attached to your application as page four. In addition, this form must also be uploaded to ERF in Excel format.

Grant Summary				
Grant Applicant:		Project:		
Baldwin Lightstream		Warren South		

Budget				
Line:	Description / Category:	Grant Funds:	Match:	Total:
1	Contractual, Consultant Fees	\$ 277,968.00	\$ 416,952.00	\$ 694,920.00
2	Equipment (Calix ONT's, Routers)	\$ 17,805.00	\$ 26,707.00	\$ 44,512.00
3	Supplies			\$ -
4	Labor (Salary, Fringe)			\$ -
5	Permitting, Licensing Fees			\$ -
6	Travel			\$ -
7	Other			\$ -
Total:		\$ 295,773.00	\$ 443,659.00	\$ 739,432.00
60.0% match requested				

Pledged Contributions				
#:	Entity:	Entity Type:	Pledge Type:	Pledge:
1	Baldwin Lightstream	Applicant	Cash	\$ 443,659.00
Total:				\$ 443,659.00

Summary of Revenue Sources and Expenditures**PROJECT TOTALS - Warren South FTTH Broadband**

Total Plant Investment	\$ 739,432.00
ONT's	\$ 30,992.00
Routers	\$ 13,520.00
Fiber Plowing, Drops & Jetting	\$ 694,920.00
Contribution of Baldwin Lightstream	\$ 443,659.00
Request Award Amount	\$ 295,773.00
Grant Funds Percentage of Total Construction Amount:	40%

The South Warren project will be a turn-key project. The contractor for the project is a contractor that BTI has hired for several fiber projects in the past. The contractor will be responsible for plowing mainline, drops and completing the splicing and testing to all eligible locations for the cost of the project.

Baldwin Telecom's contribution of \$443,659 will cover a portion of the construction costs of mainline last-mile fiber infrastructure. In addition, Baldwin Telecom will install all electronics and turn up services including the installation of ONT's and the latest carrier grade next generation Wi-Fi 6.1 router.

Exhibit B – History of Baldwin Telecom, Inc.

Baldwin Telecom has been providing telecommunication services for more than 122 years. Baldwin Telephone Exchange was formed in 1900 to provide telephone service in the Baldwin and Woodville communities. In the 1980's the company added cable television to its service offerings, changed its name to Baldwin Telecom, Inc. and expanded into the neighboring communities of Hammond and Knapp. In 2015 Baldwin Telecom began using DBA of Baldwin LightStream. The new name demonstrates the company's shift from landline phone service to broadband and attention to staying at the forefront of technology.

The cable service division of the company grew throughout the years. Since many residents in the area did not have access to cable television, Baldwin Telecom and other local telcos formed Vision Communications to provide service in nearby CenturyLink, GTE and AT&T service areas. When Vision Communications dissolved, Baldwin Telecom purchased the Roberts customers with a vision of expanding to the St. Croix River. The cable facilities and customers in the Town of Hudson were purchased from North American Communications in 2005.

Although fiber optics were first used for telephone traffic in 1977, Baldwin Telecom was an early adapter in rural Wisconsin when in 2001 it began installing FTTH facilities in new developments. In 2002 Baldwin Telecom, Inc. was recognized by US Department of Agriculture as the first independent telephone company in Wisconsin deploying FTTH in green field developments in the villages of Baldwin and Woodville. In 2006 Baldwin Telecom, Inc. was awarded the first RUS broadband loan in Wisconsin to build out new developments in Town of Hudson using fiber. The remaining Town of Hudson was recently upgraded to fiber.

Baldwin Telecom, Inc. began upgrading rural ILEC customers from copper to fiber in 2008. The upgrades in the ILEC areas continued throughout the years with the villages of Baldwin and Woodville being completed in 2021. The fiber facilities allowed customers the option of subscribing to Cable TV and upgraded their DSL connection. Initially residential customers were able to subscribe to a 10Mb connection. Today they are able to get a 300Mb connection.

Baldwin Telecom, Inc. has continued to grow its service area. In 2010 Baldwin Telecom was awarded a \$9 million federal grant/loan to install fiber optic cable in Town of Troy under the American Recovery and Reinvestment Act of 2009. The project was completed in 2011. Currently Baldwin LightStream provides service to more than 1,500 residents in the Town of Troy. Baldwin LightStream has fiber facilities in several business parks in St. Croix County including the cities of Hudson and River Falls. In 2014 Baldwin LightStream extended its fiber network to the City of New Richmond and provides service to several key businesses. While the St. Croix Crossing was being constructed, Baldwin LightStream installed fiber facilities along Highway 64 and is ready for the growth that is expected near the new bridge.